LUMINARY Level 4 Note #24

From: D. Lickly

Date: 7 October 1968

Level 4 people will have questions about specific programs and routines included in their tests. The people who are responsible for the AGC programs and routines are listed below:

Programs

P12	Larry Berman
P06	Dana De Wolf
P20	Peter Volante, Virginia Dunbar
P21	Ted Crocker
P22	Peter Volante, Virginia Dunbar
P25	Peter Volante, Jack Connor
P27	Paul Fagin
P30	Pcter Adler
P31	Pat White
P32	Pat White
.P33	Pat White
P34	Pat White
P35	Pat White
P38	Jane Goode
P39	Jane Goode
P40	Peter Adler
P41	Peter Adler
P42	Peter Adler
P47	Bob Covelli
P51	Don Millard
P52	Don Millard
P57	Don Millard
P63-P67	Don Eyles
P70	Walter Bernikowich
P71	Walter Bernikowich
P72	Pat White
P73	Pat White
P74	Pat White
P75	Pat White
P76	Tcd Crocker
P78	Janc Goode
P79	Jane Goode

Routines

R03	Peter Weissman
R04	Jim Kernan
R05	Peter Volante .
R10	Walter Bernikowieh
R11	Walter Bernikowich
R12	Bob Covelli
R13	Don Eyles
R21-R25	Peter Volante
R29	Peter Volante
R30	Frank Gauntt
R31	Ted Crocker
R36	Ted Crocker
R47	Jim Kernan, Phyllis Rye
R50-R55	Don Millard
R59	Don Millard
R60 -	Frank Gauntt
R61/R65	Virginia Dunbar, Jack Connor
R62	Frank Gauntt
R63	Frank Gauntt
R00	Dana De Wo lf
R02	Dana DeWolf
R33	George Cox
R77	Jim Kernan

Miscellaneous Areas

Pinball	John Vella, Marjorie Besas
Display Interface	Margaret Hamilton, Phyllis Rye
Restarts, Fresh Start	&
other Serviee areas	Phyllis Rye, Dana DeWolf
Integration	Bill Ostanek

Those responsible for the environment programs and routines are:

Programs

P00	Keith Glick
P06	Bob Wadsworth, Izzy Beilen
P12	Herb Chasan
P20	Eric Korngold
P21	Eric Korngold
P22	Eric Korngold
P25	Keith Gliek, Eric Korngold
P27	Lancc Drane
P30	Herb Chasan
P31	Herb Chasan
P32	Herb Chasan
P33	Herb Chasan
P34	Herb Chasan
P35	Herb Chasan
P38	Herb Chasan
P39	Herb Chasan
P40	Herb Chasa n

Herb Chasan	
Herb Chasan	·
Herb Chasan	
Bob Wadsworth,	Lance Drane
Bob Wadsworth,	Lance Drane
Bob Wadsworth,	Lance Drane
Herb Chasan	
Herb Chasan	:
Herb Chasan	
Herb Chasan	
	Herb Chasan Herb Chasan Bob Wadsworth, Bob Wadsworth, Bob Wadsworth, Herb Chasan Herb Chasan Herb Chasan

Routines

R 00	Lance Drane
	Bob Wadsworth
	Lance Drane
	-Keith Glick
	Keith Glick
R10-R14	· ·
R21-R25	Eric Korngold
R29	Eric Korngold
R30	Lance Drane
R31 -	Keith Glick, Lance Drane
R32	Keith Glick
R33	Lance Drane
R36	Keith Glick, Lance Drane
R40 .	Herb Chasan
R41	Keith Glick
R47	Keith Glick
R5 0 -R5 5	Lance Drane, Bob Wadsworth
R59	Lance Drane, Bob Wadsworth
R6 0	Herb Chasan
R61	Herb Chasan, Lance Drane
R62	Herb Chasan
R63	Herb Chasan
R65	Herb Chasan
R77	Eric Korngol d

LUMINARY LEVEL 4 TEST DESCRIPTION & PERSONNEL ASSIGNMENTS

, } .	i i	DESCRIPTION & SEQUENCE	RESPONSIBLE
. 4	TASK		ENGINEER
, p	L4.1	Separation Test (Lunar Env-Hybrid) P00, R33, P27, P00, P27, P52, P00, R47, P47, P47, P20, R31	Dion/Pickford Batra/Covelli
	L4.2	Return to Earth Abort (Lunar Env-Digital) P00, R04, P30, P52, R47, P40	Dion/Pickford Bernikowich/Millar
	L4.3	Descent Orbit Injection (Lunar Env-Hybrid) P00, P52, P30, R47, P40, R30, P25.	Pickford/Pickford Eyles/Covelli
	L4.4	Powered Descent and Coast (Lunar Env-Digital) P00, R05, P20, R47, P63, R51, P70, P40, R31	Pu/Pickford Bernikowich/Millard
· ""	L4.5	Powered Descent (Lunar Env-Hybrid) P68, P61, P65, P67, P66, P67, P68, P12, P57	Pu/Pickford Eyles/Covelli
	L4.6	Abort from Touchdown (Hybrid) P00, P63, P64, P65, P68, P71, P25, R30, R31	Pu/Pickford Adler/Covelli
	L4.7	Abort from Late Descent (Digital) P00, P63, P64, P70, P71, R30, R31	Fu/Fickford Berman/Willard Pickford/Pickford
	L4.8	Lunar Surface Navigation (Digital) P00, P57, P21, P22, R31, P00, R05	Millard/Millard Pickford/Pickford
	L4.9	Lunar	Moore/Millard
	L4.10	Lunar Launch (Digital) P00, P57, P21, P12, R47, R30, R31, P00	. Pickford/Pickford Berman/Millard
William.	1.4.11	CSI-CDH with IMU Realign and Plane Change R30, R47 P20, R31, P32. R36, P42, R30, R36, P30, P41, P52, P41, P52, P33, R3 P42, R31 P00	Kornreich/Pickford
	L4.12	CDH-TH Sequence (Lunar Env-Digital) P20, P20, R31, P33, R36, P42, R30, P20, P34, R36, P42, R31, P00	Kornreich/Pickfor White/Volante
de la	L4.13	TPI-TPM Sequence (Lunar Env-Digital) P00, P20, R31, P34, R36, P42, R31, P20, P35, R36, P41, R30, P00	Kornreich/Pickford White/Volante
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LUMINARY LEVEL 4 TEST DESCRIPTION & PERSONNEL ASSIGNMENTS

			RESPONSIBLE
TASK	DESCRIPTION & SEQUENCE		ENGINEER
L4.14	SOI-SOM Sequence (Lunar Env-Digital)	P00, P20, R31, P38 (Mode 1), P42,R30 P20, P39, P41, R31, P00, R63	Templeman, Carroll/ Pickford Gauntt/Volante
L4.15	SOI-SOM-SOR Sequence (Lunar Env-Digital)	P00, P20, P38 (Mode 1), P40, P20, P39, P41, P20, P38 (Mode 2), P40	Templeman, Carroll/ Pickford Griggs/Volante
L4.16	CSM Active CSI-CDH Sequence (Lunar-Digital)	P00, P25, P72, P76, P73, P76, R31, P21	Kornreich/Pickford Volante/Volante
L4.17	CSM Active CDH-TPI Sequence (Lunar-Digital)	P00, P25, P73, P76, P74, R36, P76, P00	Kornreich/Pickford Connor/Volante
L4.18	CSM Active TPI-TPM Sequence (Lunar-Digital)	P00, P25, P74, R36, P76, P75, P76, 700, R31	Kornreich/Pickford Connor/Volante
L4.19	CSM Active SOI-SOM Sequence (Lunar-Digital)	P00, P20, P78 (Mode 1), P76, P20, P79	Templeman, Carroll/ Pickford Gauntt/Volante
L4.20	CSM Active SOI-SOM-SOR Sequence (Lunar-	P00, P25, P78 (Mode 1), P76. P79, P76, P78 (Mode 2), P76, P21	Templeman, Carroll/ Pickford Griggs/Volante
14.21	CSM Docked (Cislunar-Digital)	P00, R05, P27, P31, P40	Dion/Pickford Fishor/Willard
L4.22	CSM Docked - IMU Align (Lunár Orbit-Digital)	P00, IMU OFF, P06, LGC ON, IMU ON P51, P00, R05	NA to 23A Fisher/Willard
L4.23	SOR with IMU OFF (Earth Orbit-Hybrid)	IMU P41,	Templeman, Carroll/ Pickford Covelli/Covelli
L4.24	SOM with IMU OFF (Earth Orbit-Hybrid)	P00, 239, P52, P42, R31, P00, R63, R05	Templeman, Carroll/ Pickford Covelli/Covelli
L4.25	External Delta V with CSM Update (Lunar-Hybrid)	P00, P20, P30, P00, R62, P42, R30, P20, R31, P00	Dion/Pickford Braunhardt/Covelli
L4.26	External Delta V with Manual Acquire (Lunar-Digital)	P00, P76, P20, R23, P30, P00, R62, P41, R30, P20, R31	Dion/Pickford Fagin/Volante
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ASSIGNMENTS	
PERSONNEL !	
TIMINARY LEVEL 4 TEST DESCRIPTION & PERSONNEL ASSIGNMENTS	•
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RESPONSIBLE ENGINEER	Kornreich/Pickford Hatch/Covelli	Kornreich/Pickford Wiggins/Covelli	Pickford/Pickford Dunbar/Volante	Fickiora/Fickiora Dunbar/Volante		Page Jo
DESCRIPTION & SEQUENCE	CSM Active CSI with RR Search (Lunar-Hybrid) P20, R24, P72, R36, P76, P20.	TPI-TPM Sequence (Earth-Hybrid) P00, P20, P34, P42, P20, P35, P41, R30, P21	Lunar Surface Navigation (Digital) P22 (Option 1), R31 P22 (Option 1), R31	Lunar Surface Navigation with RR Search P00,	Digitally	
TASK	L4.27	1.4.28	L4.29	L4.30		

LUMINARY LEVEL 4 STATUS

in ask	Enginee & run ir	Engineering Verification & run initialization data	fication on data	Initial Input		Prepared*	Test Sec Comi	Test Sequence Run Completely Through	n rough	New LGC	New LGC Time-Line 23A	o to
	Rec.	Pred.	Actual	Req.	Pred.	Actual	Reg.	Pred.	Actual	Req.	Pred.	Actual
[.4.1	6/24	8/16	8/21	7/1	: 8/23	8/23	7/22	9/20	9/23	7/29	10/8	10/11
1,4.2	.5	7/15	7/26	2/2	8/16	8/23	7/12	9/6	. 9/6	7/19	9/20	9/23
, p, 1	_ ~	7/15	7/12	8/2	7/22	7/22	7/29	8/1	. 9/8	8/5	9/6	6/6
		8/16	8/20	2/2	9/13	9/13	7/19	10/8	1.0/9	7/26	10/11	10/14 6
		8/16	8/20	7/1	8/23	8/24	.7/22	8/30	8/30	7/29	10/9	10/8
	_	8/30	8/29	9/8	9/6	6/6	8/15	9/24	0 1/01	8/22	10/11	10/11
1.4.7	6/24	8/30	8/30	7/1	9/11	9/13	7/12	10/24		7/19	10/28	
2 7 7	_ ~		7/12	7/1	7/19	7/19	.7/15	9/6	9/2	7/22	9/13	9/23
	~	7/12	7/12	7/5	7/19	7/19	7/19	9/11	9/17	7/26	9/13	9/24
1.4.10	_ ~	6/28	6/2	7/1	6/8	8/7	7/12	8/16	6/8	7/19	10/9	10/15
	. ~	8/16		7/5	9/23	9/23	7/17	9/27	9/26	7/24	10/1	10/7
11. EU	8/28	7/15	7/11		6/8	8/2	7/17	9/13	9/17	7/24	9/25	10/7
	_	7/15	7/11		6/8	8/8	7/17	9/13	9/17	7/24	9/25	10/4
07 • T T T T	7/15	7/31		7/22	8/3	8/12	8/5	8/30	8/30	8/12	10/8	10/8
41. F. T. T.	7/15	7/31	8/8	7/22	8/2	8/8	8/5	9/13	9/18	8/12	10/8	10/7
1.4 16	7/15	8/14	8/19	7/22	8/16	8/21	7/30	9/13	9/18	8/5	9/27	10/1
7.4 17	6/28	7/15	8/8	7/5	9/6	9/6	7/15	9/13	9/17	7/22	9/24	9/30
1 4 18	7/25	7/15	_	8/1	6/8	. 6/8	8/15	. 9/6	.9/6	8/22	9/24	9/30
7.4 19	7/15	7/31		7/22	8/2	8/5	8/5	8/30	8/28	8/12	10/8	10/8
7 4 20	7/15	7/31	_	7/22	8/2	10/5	8/5	,	10/2	8/12	10/8	10/7.
	6/28	8/13	_	7/5	8/20	8/23	7/15	8/27	8/30	7/22	9/10	9/10
	7/25	NA	NA	8/1	7/22	7/22	8/15	8/1	8/5	. NA	NA	NA
	01/9	6/28	7/1	6/18	7/15	7/15	6/28	7/25	7/25	2/2	6/6	9/13
3	6/10	6/28	7/1	6/28	7/15	7/15	8/2	7/25	7/25	7/15	9/13	9/18
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b	- Porto	מ	initialization deck prepared	ck prepar	or all	digital simulation	ulation de	ock read r	deck read by the computer	purer.		• (

Hybrid script and initialization deck prepared or all digita

LUMINARY LEVEL 4 STATUS

Date 10/18/68

									Laborate 1								j				المقيدية		, 1. 4 -6.4		
Test Data Points Comp.	verified.	•	. :				•						:						•			· .			
ø	Actual							• •			,	, Je					٠					·			
ion Complet	Pred.	11/6	11/6	11/11	11/11	11/11	11/11	11/10	11/6	11/6	11/11	11/6	11/6	11/6	11/6	11/6	11/6	10/25	10/25	11/6	11/1	11/6	10/25	11/6	11/6
Documentation Complete	Reg.	10/7	9/6	10/7	9/6	10/7	9/24	6/6	6/6	9/13	6/6	9/27	9/27	9/27	9/23	9/23	9/27	8/23	10/3	9/23	9/23	8/23	10/3	8/26	8/26
	Actual .		•		•		· .		hre and									10/11	10/11	•	10/16		9/20	10/1	10/7
Finish Testing	Pred.	10/30	10/25	10/30	10/30	10/30	10/30	11/4	10/25	10/25	10/30	10/25	10, 25	10/25	10/25	10/25	10/25	10/11	10/11	10/25	10/18	10/25	9/27	9/27	10/4
	Req.	9/23	8/23	9/23		9/23	9/10	.8/26	8/26	8/30	8/26	9/13	9/13	9/13	6/6	6/6	9/13	6/8	9/19	6/6	6/6	6/8	. 9/19	8/12	10/4
ication ne line	Actual		9/23	9/10		10/16	10/22		9/24	9/26		10/10	10/1	9/26	: 10/11	10/11	10/1	10/3	10/3	10/11	10/11	9/17	NA .	. 9/18	8/12
New Engineering Verification Data to match new time line	Pred.	10/24	10/8	5/13	10/93	10/16	10/15	10/31	9/27	9/27	10/23	10/10	. 10/10	10/10	10/11	10/11	10/2	. 2/6	9/27	10/11	10/11	9/13	NA	9/16	0/23
New Engine Data to m	tr q		7/96	0/10	71.70	8/5	~	7/26	7/29	8/2	7/26	7/31	7/31	7/31	8/16	8/16	, 8/12	7/26	8/29	8/16	8/16	7/26	NA AN	7/12	1/00/4
\$ 60 60 61			1.4.1	4	4. ×	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	L4.6	L4.7	L4.8	- L4.9	1.4.10	1.4.11		1.4.13	1,4.14	1.4.15	L4.16	14.17	L4.18	L4.19	1,4,20	1.4.21		1.4 23	

LUMINARY LEVEL 4 STATUS

0 t 0	Actual	10/3	10/7	10/7	10/7	9/26	9/25	
New LGC Time-Line 23A	Pred.	9/27	9/27	10/2	9/2	9/25	9/25	
New LGC	Req.	8/19	8/19	8/19	9/11		6/8	
Test Sequence Run Completely Through	Actual	9/30	9/13	10/3	9/4	9/16	0 91/6	
	Pred.	9/25	9/13	9/27	8/30	9/13	9/13	
	Req.	8/12	8/12	8/12	9/2	.8/2	8/2	
Initial Input Prepared	Actual	8/30	8/26	3/20	8/12	8/30	8/30	
	Pred.	8/30	8/20	8/20	8/7	9/6	8/30	
	Reo.	8/1	7/22	8/1	8/26	7/22	7/22	
Engineering Verification & run initialization data	Actual	8/16	8/16	8/16	7/24	8/28	8/15	
	Pred.	8/16	8/15	8/13	7/22	8/30	8/15	
	Rec.	7/25	7/15	7/25	8/19	7/15	7/15	_
Task		1,4 25					L4.30	

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Date 10/18/68

Test Data Points Comp.	verified.		
Documentation Complete	Actual		
	Pred.	11/1 11/1 10/31 10/25 20/25	
	Req.	9/20 9/20 9/20 10/7 9/20	-
Testing	Actual	10/15 10/18 10/17 10/10 10/10	
	Pred.	10/11 10/18 10/17 10/11 10/11	
. : Finish	Reo.	9/6 9/6 9/6 9/6 9/6	
New Engineering Verification Data to match new time line	Actual	10/4 10/8 10/10 10/9 9/26	
	Pred.	10/2 10/10 10/10 9/13 9/27 9/27	
New Engin Data to n	tr.	8/23 8/23 8/23 9/16 8/16	
्र 8 8 8 1		1.4.25 1.4.26 1.4.29 1.4.29 1.4.30	